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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,923	01/25/2001	Jodi F. Aboujaoude	XXT-10	5338

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EXAMINER	
PHAM, THIERRY L	
ART UNIT	PAPER NUMBER
2625	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/769,923	ABOUJAOUDE ET AL.	
	Examiner	Art Unit	
	Thierry L. Pham	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-11 and 13-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 4-11, and 13-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

o This action is responsive to the following communication: Amendment under 37 CFR §1.111 and a Request to Reopen Prosecution filed on 11/20/06 with respect to a new ground of rejection contained in Examiner's Answer dated 9/20/06.

o Claims 1-2, 4-11, 13-18 are pending; claims 3 & 12 have been canceled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-11, and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abuyama (US 5144452), and in view of Dawe et al (EP 996080).

Regarding claim 1, Abuyama discloses a method of forming an output image in an image forming system ***(image forming system, fig. 2)***, comprising:

o scanning ***(CCD scanning, col. 3, liens 53-57 and col. 6, lines 10-12)*** at least a portion of an input document;

o automatically forming a duplicate ***(automatically duplicating an original image on a single print media based upon designated four coordinates, figs. 4-7, col. 8, lines 5-62 and col. 9, lines 55+)*** input image containing at least a specific portion of the original portion of the input document containing image data;

o automatically determining dimensions ***(automatically calculating dimensions of the duplicate image, i.e., X4, Y4, figs. 4-5)*** of the duplicate input image;

o automatically determining ***(automatically determines number of times to be duplicated on a single print medium based upon designated four coordinates and determined paper size, i.e. character A to be duplicated multiple times as shown in fig. 5 and fig. 7b, col. 7, lines 60 to***

col. 8, lines 20) the number of times the duplicate input image can be replicated on a single output medium based on the determined dimensions;

o instructing the system ***(controller 81 controlling replicate operation, col. 8, lines 5-62)*** to replicate the original portion of the input document; and

o automatically replicating ***(automatically duplicating/replicating the selected portion a selected number of times, fig. 7b, col. 9, line 55 to col. 10, line 7)*** the duplicate image a selected number of times up to the determined number to form an output image on the output medium.

Abuyama's method fails to automatically determine location of an original portion of the input document containing image data. In addition, Abuyama does not explicitly teach and/or suggest determining a portion of the original image excluding any surround white-space portions of the input document.

Dawe, in the same field of endeavor for image forming system ***(fig. 1)***, teaches a method for automatically ***(automatic region selection logic 110, fig. 1, par. 19)*** determines a location of an original portion ***(automatically locating portion of the document for scanning, see paragraphs 5, 21, and 31)*** of the input document containing image data. Dawe also teaches an example of determining a location of an original portion of an input document excluding any surrounding white-space portions ***(undesirable surroundings including white-space can be excluded from being scanned by scanner via using ball-point pen, color highlighter, crayon, and etc, par. 4, for example, to scan a photograph only portion (par. 21), a highlighter is used to surround the photography only by excluding white-space surroundings, par. 10)***.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify invention of Abuyama to include a method for automatically determining a location of an original portion of an input document containing image data for scanning and printing and to exclude any surrounding white-space as taught by Dawe because of a following reason: (1) the ability to automatically distinguish a region of interest for scanning and duplicating from an undesired region of an image, i.e. white spaces (par. 10 of Dawe), thereby, reducing operating costs (i.e. inks and print medias) associated with unwanted/undesired region from reproducing; (2) only a particular portion of interest (par. 9) is being scanned rather than a whole document, thereby, reduce scanning and processing time; (3) allows multiple regions types to be indicated and classified as regions of interests (pars. 12-13); (4) other advantages of

using automatic region selection logic 110 as taught by Dawe are clearly cited in page 3, paragraphs 11-17.

Therefore, it would have been obvious to combine Abuyama with Dawe to obtain the invention as specified in claim 1.

Regarding claim 2, Abuyama further discloses the method of claim 1, further comprising selecting the number of times (duplication number designator 86, fig. 2) said input image is replicated to form said output image on said output medium.

Regarding claim 4, Abuyama further discloses the method of claim 1, further comprising receiving user instructions (instruction via control panel, fig. 2) to duplicate only a specific portion (only specific portion of document, fig. 4, also see fig. 4 of Dawe) of input document.

Regarding claim 5, Abuyama discloses a method for forming an output image in an image forming system ***(image forming system, fig. 2)***, comprising:

- obtaining instructions (instructions are provided via control panel 80, fig. 1) relating to image formation ***(e.g. duplication number designater 86 and magnification adjuster 85, fig. 2)***;
- obtaining input image data ***(CCD scanning, col. 3, liens 53-57 and col. 6, lines 10-12)*** relating to an original portion of an input document and based at least partially on said instructions ***(e.g. duplication number designater 86 and magnification adjuster 85, fig. 2)***; and
- determining a location ***(determining location of portion of original image to be duplicate, i.e., character A as shown in fig. 4, col. 7, lines 15-28, fig. 4)*** of the original portion of the input document containing image data;
- automatically forming ***(automatically duplicating/replicating the selected portion a selected number of times, fig. 7b, col. 9, line 55 to col. 10, line 7)*** a duplicate input image containing at least a specific portion of the original portion of the input document containing image data;
- automatically determining dimensions ***(automatically calculating dimensions of the duplicate image, i.e., X4, Y4, figs. 4-5)*** of the duplicate input image;
- automatically determining the number of times ***(automatically determines number of times to be duplicated on a single print medium based upon designated four coordinates and***

determined paper size, i.e. character A to be duplicated multiple times as shown in fig. 5 and fig. 7b, col. 7, lines 60 to col. 8, lines 20) the duplicate input image can be replicated on a single output medium based on the determined dimensions; and

o forming an output image comprising only said duplicate input image replicated ***(automatically duplicating/replicating the selected portion a selected number of times, fig. 7b, col. 9, line 55 to col. 10, line 7)*** one or more times on a single printing medium up to the determined number as directed by said instructions.

Abuyama's method fails to automatically determine location of an original portion of the input document containing image data. In addition, Abuyama does not explicitly teach and/or suggest determining a portion of the original image excluding any surround white-space portions of the input document.

Dawe, in the same field of endeavor for image forming system ***(fig. 1)***, teaches a method for automatically ***(automatic region selection logic 110, fig. 1, par. 19)*** determines a location of an original portion ***(automatically locating portion of the document for scanning, see paragraphs 5, 21, and 31)*** of the input document containing image data. Dawe also teaches an example of determining a location of an original portion of an input document excluding any surrounding white-space portions ***(undesirable surroundings including white-space can be excluded from being scanned by scanner via using ball-point pen, color highlighter, crayon, and etc, par. 4, for example, to scan a photograph only portion (par. 21), a highlighter is used to surround the photography only by excluding white-space surroundings, par. 10)***.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify invention of Abuyama to include a method for automatically determining a location of an original portion of an input document containing image data for scanning and printing and to exclude any surrounding white-space as taught by Dawe because of a following reason: (1) the ability to automatically distinguish a region of interest for scanning and duplicating from an undesired region of an image, i.e. white spaces (par. 10 of Dawe), thereby, reducing operating costs (i.e. inks and print medias) associated with unwanted/undesired region from reproducing; (2) only a particular portion of interest (par. 9) is being scanned rather than a whole document, thereby, reduce scanning and processing time; (3) allows multiple regions types to be indicated and classified as regions of interests (pars. 12-13); (4) other advantages of

using automatic region selection logic 110 as taught by Dawe are clearly cited in page 3, paragraphs 14-17.

Therefore, it would have been obvious to combine Abuyama with Dawe to obtain the invention as specified in claim 5.

Regarding claim 6, Abuyama further discloses a method according to claim 5, wherein said obtaining instructions including communicating with a user through a user interface (display 100, fig. 2) and receiving instructions to duplicate only a specific portion of input document form output image.

Regarding claim 7, Abuyama further discloses the method according to claim 5, wherein said obtaining instructions include receiving of instructions as to which specific original portion (instruction to duplicate portion of original image, fig. 7a-7b) of said input image is to be replicated.

Regarding claim 8, Abuyama further discloses the method according to claim 5, wherein said obtaining instructions include receiving instructions as to a number of replications (figs. 4-5) of said original portion of said input image to be replicated.

Regarding claim 9, Abuyama further disclsoes the method according to claim 5, wherein obtaining input image data include scanning (read image ST13, fig. 7b) a specific portion of the input document.

Regarding claim 10, Abuyama further discloses the method of claim 5, wherein obtaining input data include receiving a signal from a remote device containing said input image data (obviously, the image forming system as shown in fig. 1 also can be connected to plurality of external devices, i.e. host computer, scanner, and etc, and such system are widely available in the art).

Regarding claim 11, Abuyama further discloses the method according to claim 5, wherein forming the output image include printing said the duplicate input image in a repeated fashion up to a predetermined number (predetermined number of times to be duplicated on a single print media, fig. 7a-7b) in occurence with said instructions.

Regarding claim 13, Abuyama further discloses the method of claim 5, further comprising allowing a user to specify an offset (left margin, fig. 7b) for said input document on said output medium.

Regarding claim 14, Abuyama discloses an image forming system ***(image forming system, fig. 2***, comprising:

- an input stage ***(CCD scanning, col. 3, liens 53-57 and col. 6, lines 10-12)*** for receiving image data corresponding to an input document;
- a controller for determining a location ***(determining location of portion of original image to be duplicate, i.e., character A as shown in fig. 4, col. 7, lines 15-28, fig. 4)*** of an original portion of the input document containing image data, automatically forming ***(automatically duplicating/replicating the selected portion a selected number of times, fig. 7b, col. 9, line 55 to col. 10, line 7)*** a duplicate input image containing at least a specific portion of the original portion of the input document containing image data and automatically determining dimensions ***(automatically calculating dimensions of the duplicate image, i.e., X4, Y4, figs. 4-5)*** of the duplicate input image; an image multiplier for automatically determining a number of times ***(automatically determines number of times to be duplicated on a single print medium based upon designated four coordinates and determined paper size, i.e. character A to be duplicated multiple times as shown in fig. 5 and fig. 7b, col. 7, lines 60 to col. 8, lines 20)*** the duplicate input image may be formed on a substrate based on the determined dimensions.

Abuyama's method fails to automatically determine location of an original portion of the input document containing image data. In addition, Abuyama does not explicitly teach and/or suggest determining a portion of the original image excluding any surround white-space portions of the input document.

Dawe, in the same field of endeavor for image forming system ***(fig. 1)***, teaches a method for automatically ***(automatic region selection logic 110, fig. 1, par. 19)*** determines a location of an original portion ***(automatically locating portion of the document for scanning, see paragraphs 5, 21, and 31)*** of the input document containing image data. Dawe also teaches an example of determining a location of an original portion of an input document excluding any surrounding white-space portions ***(undesirable surroundings including white-space can be excluded from being scanned by scanner via using ball-point pen, color highlighter, crayon, and etc, par. 4, for example, to scan a photograph only portion (par. 21), a highlighter is used to surround the photography only by excluding white-space surroundings, par. 10)***.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify invention of Abuyama to include a method for automatically determining a location of an original portion of an input document containing image data for scanning and printing and to exclude any surrounding white-space as taught by Dawe because of a following reason: (1) the ability to automatically distinguish a region of interest for scanning and duplicating from an undesired region of an image, i.e. white spaces (par. 10 of Dawe), thereby, reducing operating costs (i.e. inks and print medias) associated with unwanted/undesired region from reproducing; (2) only a particular portion of interest (par. 9) is being scanned rather than a whole document, thereby, reduce scanning and processing time; (3) allows multiple regions types to be indicated and classified as regions of interests (pars. 12-13); (4) other advantages of using automatic region selection logic 110 as taught by Dawe are clearly cited in page 3, paragraphs 14-17.

Therefore, it would have been obvious to combine Abuyama with Dawe to obtain the invention as specified in claim 14.

Regarding claim 15, Abuyama further discloses the system of claim 14, wherein said control stage comprises a user interface (display 100, fig. 2) for selecting the number of times said the duplicate input image replicated in said output image on said printing medium.

Regarding claim 16, Abuyama further discloses the system of claim 14, wherein said control stage comprises a user interface (display 100, fig. 2) for providing printing instructions.

Regarding claim 17, Abuyama further discloses the system of claim 14, wherein said control stage determines the total number of print image replications that can be reproduced (abstract and col. 1, lines 33-36) in said output image on said output medium.

Regarding claim 18, Abuyama further dicloses the system of claim 14, wherein said control stage can automatically calculate maximum number of reproductions (abstract and col. 1, lines 33-65) of said duplicate input image possible for said single output medium.

Response to Arguments

Applicant's arguments filed 11/20/06 have been fully considered but they are not persuasive.

o Regarding claim 1, the applicants argued the cited prior arts of record fail to teach and/or suggest automatic determination of dimensions of automatically formed duplicate input image and generation of a duplicate input image that excludes surround white-space areas and then determined the number of replications that can be made based on the image data of the duplicate input image excluding surrounding white-space area.

In response, the Examiner fully disagrees. The subject matters as argued above are newly added features/limitations and were not previously cited in rejected claim 1. However, upon further consideration of the cited prior arts of record, Abuyama teaches an example of ***automatically calculating dimensions of the duplicate image, i.e., X4, Y4, figs. 4-5.*** Dawe teaches a method for automatically ***(automatic region selection logic 110, fig. 1, par. 19)*** determines a location of an original portion ***(automatically locating portion of the document for scanning, see paragraphs 5, 21, and 31)*** of the input document containing image data. Dawe also teaches an example of determining a location of an original portion of an input document excluding any surrounding white-space portions ***(undesirable surroundings including white-space can be excluded from being scanned by scanner via using ball-point pen, color highlighter, crayon, and etc, par. 4, for example, to scan a photograph only portion (par. 21), a highlighter is used to surround the photography only by excluding white-space surroundings, par. 10)***.

In view of the Request to Reopen Prosecution filed on 11/20/06 filed, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth above.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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